## IN THE CLAIMS:

Please cancel claims 1-18, 21, 25, 26, 27, and 29 without prejudice.

Please amend claims 20, 22, 28, 30, 37 and 40, as follows:

(Amended) In a battery conditioning system, [according to claim 17] a portable battery powered utilization <u>device</u>

> of size and weight to be held in one hand during use, and operating from battery power during portable operation thereof,

battery means operatively coupled with said utilization device for supplying operating power thereto during portable operation,

battery conditioning system means coupled with said utilization device during conditioning operation and operatively coupled with said battery means and comprising battery conditioning means for effecting conditioning

of said battery means, and

battery parameter sensing means for sensing a battery parameter, said battery conditioning system means including computer operating means operatively coupled with said battery conditioning means and controlling

> conditioning of said battery means in conjunction with said battery parameter

sensing means,

said computer operating means having communications means for the transmission of data concerning said battery means to a remote station.

(Amended) In a battery conditioning system

[according to claim 21] a portable battery powered utilization device

of size and weight to be held in one hand
during use, and operating from battery power
during portable operation thereof,

battery means operatively coupled with said utilization

device for supplying operating power thereto

during portable operation,

battery conditioning system means coupled with

said utilization device during conditioning
operation and operatively coupled with said
battery means and comprising battery
conditioning means for effecting conditioning
of said battery means, and

(Y)

battery parameter sensing means for sensing a battery parameter, said battery conditioning system means including computer

operating means operatively coupled with said battery conditioning means and controlling conditioning of said battery means in conjunction with said battery parameter sensing means.

said battery conditioning system means being responsive to a computer generated control signal from the computer operating means, and controlling the supply of charging current to said battery means during a conditioning operation in accordance with said computer generated control signal,

said battery conditioning system means comprising a charging current control circuit for receiving a control signal and for controlling the supply of charging current to said battery means according to said control signal, and control signal generating means for generating a default value of said control signal in the absence of a computer generated control signal from the computer operating means, and said computer operating means being coupled with said control signal generating means for altering the value of charging current away from said default value according to a computer generated control signal from said computer operating means.

(Amended) In a battery conditioning system, [according to claim 27] a portable battery powered utilization device

of size and weight to be held in one hand during use, and operating from battery power during portable operation thereof,

battery means operatively coupled with said utilization

device for supplying operating power thereto

during portable operation,

battery conditioning system means coupled with

said utilization device during conditioning

operation and operatively coupled with said

battery means and comprising battery

conditioning means for effecting conditioning

of said battery means, and

battery parameter sensing means for sensing a battery parameter,
said battery conditioning system means including computer

operating means operatively coupled with said
battery conditioning means and controlling

8

conditioning of said battery means in conjunction with said battery parameter sensing means.

said computer operating means having communications means for the transmission of data concerning said battery means, said communications means comprising digital to analog converter means in said utilization device and controlled by said computer operating means for supplying an analog output signal to said battery conditioning means

said battery conditioning means comprising an external battery charging circuit external to said utilization device, and having a control signal generating means for establishing a default value of battery charging current to be supplied by said circuit in the absence of an analog output signal from said digital to analog converter means.

(Amended) A portable battery powered system comprising a portable battery powered utilization device operating from battery power during portable operation,

battery means operatively coupled with said

utilization device for supplying operating

power thereto during portable operation, and

conditioning control means comprising computer

operating means having computer output means for coupling with an external battery conditioning circuit during conditioning of the battery means, with said computer operating means of said portable utilization device supplying a computer generated control signal according to a measured battery

B

God Cond

parameter and to a battery charging circuit to control charging current supplied to said battery means during a battery charging operation.

Claim 3 (Amended) A portable battery powered system [according to claim 30,] comprising a portable battery powered utilization device

operating from battery power during portable
operation.

battery means operatively coupled with said

utilization device for supplying operating

power thereto during portable operation, and

conditioning control means comprising computer

operating means having computer output means
for coupling with an external battery
conditioning circuit during conditioning of
the battery means,

with said computer output means comprising digital to analog converter means for receiving a computer generated control signal from the computer operating means and for supplying an analog output signal to an external battery current supply circuit so as to control the value of charging current supplied to said battery means.

Claim 10. (Amended) A portable battery powered system
[according to claim 30,] comprising a portable battery powered
utilization device

operating from battery power during portable
operation,

battery means operatively coupled with said